



IFWO

## RAW SEQUENCE LISTING

DATE: 08/30/2004

PATENT APPLICATION: US/10/757,843

TIME: 14:43:20

Input Set : N:\Crf3\RULE60\10757843.raw.txt

Output Set: N:\CRF4\08302004\J757843.raw

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1 <110> APPLICANT: Clark, Mike A
2 <120> TITLE OF INVENTION: Modified Arginine Deiminase
3 <130> FILE REFERENCE: PHOE0059
4 <140> CURRENT APPLICATION NUMBER: US/10/757,843
5 <141> CURRENT FILING DATE: 2004-01-15
6 <150> PRIOR APPLICATION NUMBER: US/09/723,546
7 <151> PRIOR FILING DATE: 2000-11-28
8 <150> PRIOR APPLICATION NUMBER: 09/023,809
9 <151> PRIOR FILING DATE: 1998-02-13
10 <160> NUMBER OF SEQ ID NOS: 14
11 <170> SOFTWARE: PatentIn Ver. 2.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 410
15 <212> TYPE: PRT
16 <213> ORGANISM: Mycoplasma arginini
17 <400> SEQUENCE: 1
18   Met Ser Val Phe Asp Ser Lys Phe Lys Gly Ile His Val Tyr Ser Glu
19       1           5           10           15
20   Ile Gly Glu Leu Glu Ser Val Leu Val His Glu Pro Gly Arg Glu Ile
21       20           25           30
22   Asp Tyr Ile Thr Pro Ala Arg Leu Asp Glu Leu Leu Phe Ser Ala Ile
23       35           40           45
24   Leu Glu Ser His Asp Ala Arg Lys Glu His Lys Gln Phe Val Ala Glu
25       50           55           60
26   Leu Lys Ala Asn Asp Ile Asn Val Val Glu Leu Ile Asp Leu Val Ala
27       65           70           75           80
28   Glu Thr Tyr Asp Leu Ala Ser Gln Glu Ala Lys Asp Lys Leu Ile Glu
29       85           90           95
30   Glu Phe Leu Glu Asp Ser Glu Pro Val Leu Ser Glu Glu His Lys Val
31       100          105          110
32   Val Val Arg Asn Phe Leu Lys Ala Lys Lys Thr Ser Arg Lys Leu Val
33       115          120          125
34   Glu Ile Met Met Ala Gly Ile Thr Lys Tyr Asp Leu Gly Ile Glu Ala
35       130          135          140
36   Asp His Glu Leu Ile Val Asp Pro Met Pro Asn Leu Tyr Phe Thr Arg
37       145          150          155          160
38   Asp Pro Phe Ala Ser Val Gly Asn Gly Val Thr Ile His Tyr Met Arg
39       165          170          175
40   Tyr Lys Val Arg Gln Arg Glu Thr Leu Phe Ser Arg Phe Val Phe Ser
41       180          185          190
42   Asn His Pro Lys Leu Ile Asn Thr Pro Trp Tyr Tyr Asp Pro Ser Leu
43       195          200          205
44   Lys Leu Ser Ile Glu Gly Gly Asp Val Phe Ile Tyr Asn Asn Asp Thr

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45          210          215          220
46  Leu Val Val Gly Val Ser Glu Arg Thr Asp Leu Gln Thr Val Thr Leu
47  225          230          235          240
48  Leu Ala Lys Asn Ile Val Ala Asn Lys Glu Cys Glu Phe Lys Arg Ile
49          245          250          255
50  Val Ala Ile Asn Val Pro Lys Trp Thr Asn Leu Met His Leu Asp Thr
51          260          265          270
52  Trp Leu Thr Met Leu Asp Lys Asp Lys Phe Leu Tyr Ser Pro Ile Ala
53          275          280          285
54  Asn Asp Val Phe Lys Phe Trp Asp Tyr Asp Leu Val Asn Gly Gly Ala
55          290          295          300
56  Glu Pro Gln Pro Val Glu Asn Gly Leu Pro Leu Glu Gly Leu Leu Gln
57  305          310          315          320
58  Ser Ile Ile Asn Lys Lys Pro Val Leu Ile Pro Ile Ala Gly Glu Gly
59          325          330          335
60  Ala Ser Gln Met Glu Ile Glu Arg Glu Thr His Phe Asp Gly Thr Asn
61          340          345          350
62  Tyr Leu Ala Ile Arg Pro Gly Val Val Ile Gly Tyr Ser Arg Asn Glu
63          355          360          365
64  Lys Thr Asn Ala Ala Leu Glu Ala Ala Gly Ile Lys Val Leu Pro Phe
65          370          375          380
66  His Gly Asn Gln Leu Ser Leu Gly Met Gly Asn Ala Arg Cys Met Ser
67  385          390          395          400
68  Met Pro Leu Ser Arg Lys Asp Val Lys Trp
69          405          410
71 <210> SEQ ID NO: 2
72 <211> LENGTH: 410
73 <212> TYPE: PRT
74 <213> ORGANISM: Mycoplasma arthritidis
75 <400> SEQUENCE: 2
76  Met Ser Val Phe Asp Ser Lys Phe Lys Gly Ile His Val Tyr Ser Glu
77  1          5          10          15
78  Ile Gly Glu Leu Glu Ser Val Leu Val His Glu Pro Gly Arg Glu Ile
79          20          25          30
80  Asp Tyr Ile Thr Pro Ala Arg Leu Asp Glu Leu Leu Phe Ser Ala Ile
81          35          40          45
82  Leu Glu Ser His Asp Ala Arg Lys Glu Gln Ser Gln Phe Val Ala Ile
83          50          55          60
84  Leu Lys Ala Asn Asp Ile Asn Val Val Glu Thr Ile Asp Leu Val Ala
85          65          70          75          80
86  Glu Thr Tyr Asp Leu Ala Ser Gln Glu Ala Lys Asp Arg Leu Ile Glu
87          85          90          95
88  Glu Phe Leu Glu Asp Ser Glu Pro Val Leu Ser Glu Ala His Lys Lys
89          100          105          110
90  Val Val Arg Asn Phe Leu Lys Ala Lys Lys Thr Ser Arg Lys Leu Val
91          115          120          125
92  Glu Leu Met Met Ala Gly Ile Thr Lys Tyr Asp Leu Gly Val Glu Ala
93          130          135          140
94  Asp His Glu Leu Ile Val Asp Pro Met Pro Asn Leu Tyr Phe Thr Arg

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95      145      150      155      160
96      Asp Pro Phe Ala Ser Val Gly Asn Gly Val Thr Ile His Phe Met Arg
97              165              170              175
98      Tyr Lys Val Arg Arg Arg Glu Thr Leu Phe Ser Arg Phe Val Phe Arg
99              180              185              190
100     Asn His Pro Lys Leu Val Asn Thr Pro Trp Tyr Tyr Asp Pro Ala Met
101              195              200              205
102     Lys Leu Ser Ile Glu Gly Gly Asp Val Phe Ile Tyr Asn Asn Asp Thr
103              210              215              220
104     Leu Val Val Gly Val Ser Glu Arg Thr Asp Leu Asp Thr Val Thr Leu
105              225              230              235              240
106     Leu Ala Lys Asn Leu Val Ala Asn Lys Glu Cys Glu Phe Lys Arg Ile
107              245              250              255
108     Val Ala Ile Asn Val Pro Lys Trp Thr Asn Leu Met His Leu Asp Thr
109              260              265              270
110     Trp Leu Thr Met Leu Asp Lys Asn Lys Phe Leu Tyr Ser Pro Ile Ala
111              275              280              285
112     Asn Asp Val Phe Lys Phe Trp Asp Tyr Asp Leu Val Asn Gly Gly Ala
113              290              295              300
114     Glu Pro Gln Pro Val Glu Asn Gly Leu Pro Leu Glu Lys Leu Leu Gln
115              305              310              315              320
116     Ser Ile Ile Asn Lys Lys Pro Val Leu Ile Pro Ile Ala Gly Glu Gly
117              325              330              335
118     Ala Ser Gln Met Glu Ile Glu Arg Glu Thr His Phe Asp Gly Thr Asn
119              340              345              350
120     Tyr Ile Ala Ile Arg Pro Gly Val Val Ile Gly Tyr Ser Arg Asn Glu
121              355              360              365
122     Lys Thr Asn Ala Ala Leu Lys Ala Ala Gly Ile Lys Val Leu Pro Phe
123              370              375              380
124     His Gly Asn Gln Leu Ser Leu Gly Met Gly Asn Ala Arg Cys Met Ser
125              385              390              395              400
126     Met Pro Leu Ser Arg Lys Asp Val Lys Trp
127              405              410
129 <210> SEQ ID NO: 3
130 <211> LENGTH: 409
131 <212> TYPE: PRT
132 <213> ORGANISM: Mycoplasma hominis
133 <400> SEQUENCE: 3
134     Met Ser Val Phe Asp Ser Lys Phe Asn Gly Ile His Val Tyr Ser Glu
135           1           5           10           15
136     Ile Gly Glu Leu Glu Thr Val Leu Val His Glu Pro Gly Arg Glu Ile
137           20           25           30
138     Asp Tyr Ile Thr Pro Ala Arg Leu Asp Glu Leu Leu Phe Ser Ala Ile
139           35           40           45
140     Leu Glu Ser His Asp Ala Arg Lys Glu His Gln Ser Phe Val Lys Ile
141           50           55           60
142     Met Lys Asp Arg Gly Ile Asn Val Val Glu Leu Thr Asp Leu Val Ala
143           65           70           75           80
144     Glu Thr Tyr Asp Leu Ala Ser Lys Ala Ala Lys Glu Glu Phe Ile Glu

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Input Set : N:\Crf3\RULE60\10757843.raw.txt

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```

145              85              90              95
146  Thr Phe Leu Glu Glu Thr Val Pro Val Leu Thr Glu Ala Asn Lys Lys
147              100              105              110
148  Ala Val Arg Ala Phe Leu Leu Ser Lys Pro Thr His Glu Met Val Glu
149              115              120              125
150  Phe Met Met Ser Gly Ile Thr Lys Tyr Glu Leu Gly Val Glu Ser Glu
151              130              135              140
152  Asn Glu Leu Ile Val Asp Pro Met Pro Asn Leu Tyr Phe Thr Arg Asp
153  145              150              155              160
154  Pro Phe Ala Ser Val Gly Asn Gly Val Thr Ile His Phe Met Arg Tyr
155              165              170              175
156  Ile Val Arg Arg Arg Glu Thr Leu Phe Ala Arg Phe Val Phe Arg Asn
157              180              185              190
158  His Pro Lys Leu Val Lys Thr Pro Trp Tyr Tyr Asp Pro Ala Met Lys
159              195              200              205
160  Met Pro Ile Glu Gly Gly Asp Val Phe Ile Tyr Asn Asn Glu Thr Leu
161              210              215              220
162  Val Val Gly Val Ser Glu Arg Thr Asp Leu Asp Thr Ile Thr Leu Leu
163  225              230              235              240
164  Ala Lys Asn Ile Lys Ala Asn Lys Glu Val Glu Phe Lys Arg Ile Val
165              245              250              255
166  Ala Ile Asn Val Pro Lys Trp Thr Asn Leu Met His Leu Asp Thr Trp
167              260              265              270
168  Leu Thr Met Leu Asp Lys Asn Lys Phe Leu Tyr Ser Pro Ile Ala Asn
169              275              280              285
170  Asp Val Phe Lys Phe Trp Asp Tyr Asp Leu Val Asn Gly Gly Ala Glu
171              290              295              300
172  Pro Gln Pro Gln Leu Asn Gly Leu Pro Leu Asp Lys Leu Leu Ala Ser
173  305              310              315              320
174  Ile Ile Asn Lys Glu Pro Val Leu Ile Pro Ile Gly Gly Ala Gly Ala
175              325              330              335
176  Thr Glu Met Glu Ile Ala Arg Glu Thr Asn Phe Asp Gly Thr Asn Tyr
177              340              345              350
178  Leu Ala Ile Lys Pro Gly Leu Val Ile Gly Tyr Asp Arg Asn Glu Lys
179              355              360              365
180  Thr Asn Ala Ala Leu Lys Ala Ala Gly Ile Thr Val Leu Pro Phe His
181              370              375              380
182  Gly Asn Gln Leu Ser Leu Gly Met Gly Asn Ala Arg Cys Met Ser Met
183  385              390              395              400
184  Pro Leu Ser Arg Lys Asp Val Lys Trp
185              405

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187 &lt;210&gt; SEQ ID NO: 4

188 &lt;211&gt; LENGTH: 23

189 &lt;212&gt; TYPE: DNA

190 &lt;213&gt; ORGANISM: Mycoplasma arginini

191 &lt;400&gt; SEQUENCE: 4

192 gcaatcgatg tgtatttgac agt

23

194 &lt;210&gt; SEQ ID NO: 5

195 &lt;211&gt; LENGTH: 33

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Input Set : N:\Crf3\RULE60\10757843.raw.txt

Output Set: N:\CRF4\08302004\J757843.raw

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196 <212> TYPE: DNA
197 <213> ORGANISM: Mycoplasma arginini
198 <400> SEQUENCE: 5
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201 <210> SEQ ID NO: 6
202 <211> LENGTH: 411
203 <212> TYPE: PRT
204 <213> ORGANISM: Steptococcus pyogenes
205 <400> SEQUENCE: 6
206      Met Thr Ala Gln Thr Pro Ile His Val Tyr Ser Glu Ile Gly Lys Leu
207           1             5             10             15
208      Lys Lys Val Leu Leu His Arg Pro Gly Lys Glu Ile Glu Asn Leu Met
209           20             25             30
210      Pro Asp Tyr Leu Glu Arg Leu Leu Phe Asp Asp Ile Pro Phe Leu Glu
211           35             40             45
212      Asp Ala Gln Lys Glu His Asp Ala Phe Ala Gln Ala Leu Arg Asp Glu
213           50             55             60
214      Gly Ile Glu Val Leu Tyr Leu Glu Thr Leu Ala Ala Glu Ser Leu Val
215           65             70             75             80
216      Thr Pro Glu Ile Arg Glu Ala Phe Ile Asp Glu Tyr Leu Ser Glu Ala
217           85             90             95
218      Asn Ile Arg Gly Arg Ala Thr Lys Lys Ala Ile Arg Glu Leu Leu Met
219           100            105            110
220      Ala Ile Glu Asp Asn Gln Glu Leu Ile Glu Lys Thr Met Ala Gly Val
221           115            120            125
222      Gln Lys Ser Glu Leu Pro Glu Ile Pro Ala Ser Glu Lys Gly Leu Thr
223           130            135            140
224      Asp Leu Val Glu Ser Asn Tyr Pro Phe Ala Ile Asp Pro Met Pro Asn
225           145            150            155            160
226      Leu Tyr Phe Thr Arg Asp Pro Phe Ala Thr Ile Gly Thr Gly Val Ser
227           165            170            175
228      Leu Asn His Met Phe Ser Glu Thr Arg Asn Arg Glu Thr Leu Tyr Gly
229           180            185            190
230      Lys Tyr Ile Phe Thr His His Pro Ile Tyr Gly Gly Gly Lys Val Pro
231           195            200            205
232      Met Val Tyr Asp Arg Asn Glu Thr Thr Arg Ile Glu Gly Gly Asp Glu
233           210            215            220
234      Leu Val Leu Ser Lys Asp Val Leu Ala Val Gly Ile Ser Gln Arg Thr
235           225            230            235            240
236      Asp Ala Ala Ser Ile Glu Lys Leu Leu Val Asn Ile Phe Lys Gln Asn
237           245            250            255
238      Leu Gly Phe Lys Lys Val Leu Ala Phe Glu Phe Ala Asn Asn Arg Lys
239           260            265            270
240      Phe Met His Leu Asp Thr Val Phe Thr Met Val Asp Tyr Asp Lys Phe
241           275            280            285
242      Thr Ile His Pro Glu Ile Glu Gly Asp Leu Arg Val Tyr Ser Val Thr
243           290            295            300
244      Tyr Asp Asn Glu Glu Leu His Ile Val Glu Glu Lys Gly Asp Leu Ala
245           305            310            315            320

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/757,843

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Input Set : N:\Crf3\RULE60\10757843.raw.txt

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